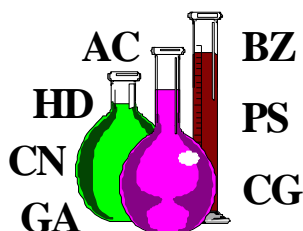


U.S. Army Center for Health Promotion and Preventive Medicine



General Facts About Tear Agent α-Bromobenzylcyanide (CA)

218-42-1096

General

CA was the first tear agent that came into existence at the end of the World War I. It was outmoded in 1920 with the introduction of the CN series and is now obsolete in NATO inventories. The tear compounds cause a flow of tears and irritation of the skin. Because tear compounds produce only transient casualties, they are widely used for training, riot control, and situations where long-term incapacitation is unacceptable. When used against poorly equipped guerrilla or revolutionary armies, these compounds have proved extremely effective. When released indoors, they can cause serious illness or death.

Synonyms

4-Bromophenylacetonitrile.

Description

Pure bromobenzylcyanide is a colorless crystalline solid with a sour or rotten fruit odor.

Overexposure Effects

CA is usually used in solution with ether or acetone as an aerosol. It produces a severe burning sensation to the mucous membranes and equally severe lacrimation to the eyes accompanied by headache and nausea. The nausea may lead to vomiting although the vomiting is more of a psychological reaction than physiological. CA will go into solution with human sweat and will incur a burning sensation to the face, especially in the areas around the mouth, nose, and eyes. It will penetrate clothing, making the areas around the neck, armpits, the tender skin areas behind the elbows, knees and around the buttocks and crotch susceptible to rashes and blisters. The vapors can be lethal in enclosed or confined spaces within a few minutes without prior respiratory protection. Nausea can lead to unconsciousness which may mean suffocation.

Emergency and First-Aid Procedures

Inhalation: remove victim from the source immediately; seek medical attention immediately.

Eye Contact: don a respiratory protective mask; flush eyes immediately with copious amounts of water; seek medical attention immediately.

Skin Contact: remove victim from the source immediately; decontaminate the skin immediately with copious amounts of water; decontaminate clothing with steam or by boiling; 20 percent alcohol caustic soda is effective on material, but may damage it; seek medical attention immediately.

Ingestion: give victim milk to drink; seek medical attention immediately.